User Guide

3Djoy *JoysmakerR2 3D Printer*

1 General Info ---------- 4

2 Assemble the printer---------- 7

2.1 Count the Item list---------- 7

2.2 Assemble the Printer ---------- 9

2.2.1 Assemble the extruder ---------- 9

2.2.2 Assemble the filament roller----------13

2.2.3 Leveling the bed ----------13

3 Prepare to print ----------15

3.1 Know the principle ----------15

3.2 Generate Gcode----------16

3.2.1 Cura install ----------16

3.2.2 Cura usage ----------20

乐享 3D
www.3DJoy.cn

3.3 LCD Controller Options ----------22

3.3.1 Introduction on LCD controller -------22

3.3.2 Operations ----------23

3.3.3 LCD controller option when printing 29

3.3.4 Fill the nozzle with filament----------30

4 Start to Print ----------31

4.1 Power on the printer----------31

4.2 Start to Print ----------32

乐享 3D
www.3DJoy.cn

1 General Info

A. Security

- ✓ Do not use other power supply other than the one provided by 3Djoy. JoysMaker 3D printer power supply is designed with strict current control and defense mechanism.
- ✓ Don’s touch the hot end when the printer is working, the temperature is as high as more than 200℃.
- ✓ Unplug the wires, when moving the 3D printer.
- ✓ Check the connection of the wires is in good status before printing.

B. Protection

- ✓ Waterproof rain, water.

乐享 3D
www.3DJoy.cn

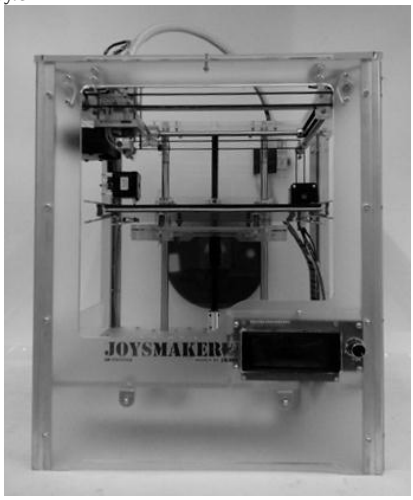
- ✓ Do not hit the frame to cause deformation.
- ✓ Do not disassemble the machine, so as not to break the machine.
- ✓ Long time not using the machine, seal the machine and store it. Next time you use it you need to daub grease.
- ✓ Do not press the printing head, or else the 6mm rod may bend, hence the printing quality may be affected.
- ✓ Unplug the wires during thunderstorm weather.
- ✓ To replace the nozzle, you need to heat the nozzle firstly till the filament is melted.

C. JoysmakerR2 User Guide

- ✓ In order not to break the machine during transport, we put the extruder and the machine separately.
- ✓ When receiving the machine, assemble it according to our user guide.

乐享 3D
www.3DJoy.cn

www.3djoy.cn



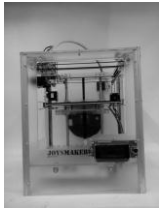
JoysmakerR2

乐享3D
www.3DJoy.cn

2 Assemble the printer

2.1 Count the Item list

Item list: Printer, extruder, filament Roller, filament, power supply cable, digital cable , screw driver, tape, oil, SD card.



Printer

Extruder

Filament Roller

乐享 3D
www.3DJoy.cn

www.3djoy.cn

Cables

Tape, screw driver, oil, SD card

Filament

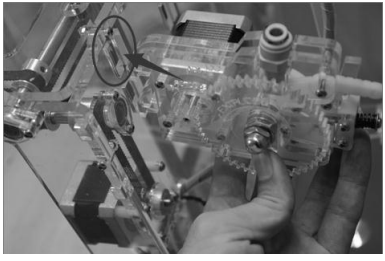
Note: When receiving the package, if the packaging is broken from the outside, do not sign it. Take photos and contact us a.s.a.p. or go to the shipping company to request for compensation.

乐享 3D
www.3DJoy.cn

2.2 Assemble the Printer

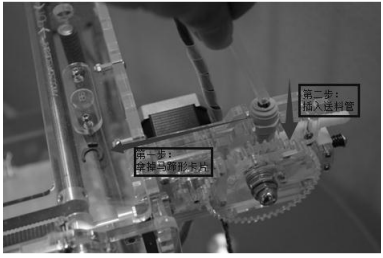
2.2.1 Assemble the extruder

1). Insert the extruder into the printer as shown bellow

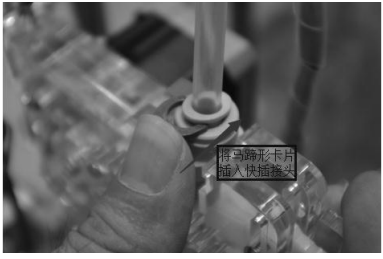


2). Take off the blue horse shoe, stick the broaden tube into the quick plug.

乐享3D
www.3DJoy.cn



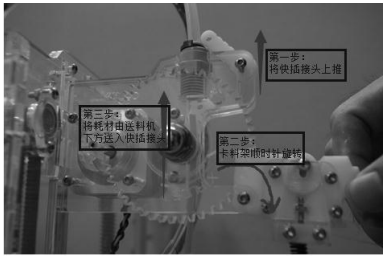
3). Insert the blue horse shoe into the quick plug.



Note: make sure the broaden tube is inserted to the end.

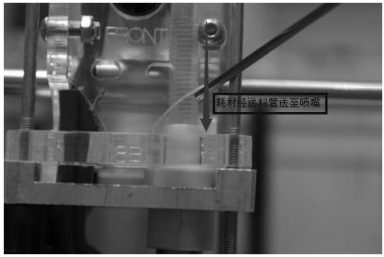
4). Put the filament into the extuder

乐享3D
www.3DJoy.cn



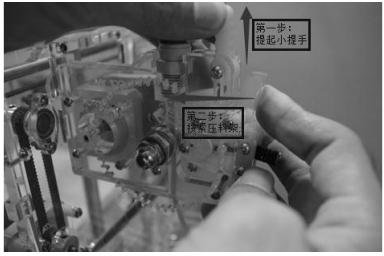
Note: Better cut the filament sharp, so that it will be easier to insert it to the nozzle.

5). Insert the filament till the nozzle



乐享3D
www.3DJoy.cn

6). Fasten the extruder as bellow, step1.



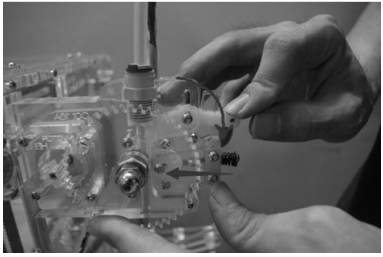
Note: Do not use too much force.

7). Fasten the extruder as bellow, step2

乐享3D
www.3DJoy.cn

Note: Do not use too much force.

8). Fasten the extruder as bellow, step3



2.2.2 Assemble the filament roller

Put the filament roller onto the printer, then put filament onto the roller.

2.2.3 Leveling the bed

The bed is already leveled and tested before shipping. But it is possible that

the bed become unleveled due to the shaking in the transportation.

Predation: Turn off the power, move the printing head to home.

1). Turn the Z-leadscrew until the the extruder head is almost touching the build-platform.

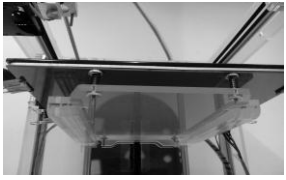
2). Move the printhead to the front left corner.

3). Turn the adjustment bolt up until it touches the platform.

4). Screw DOWN the front right of the platform until you can move the print head to the right side of the platform without scratching the platform.

5). Then turn it up slightly until it also touches the platform.

6). Repeat this process for the adjustment bolts in the back.



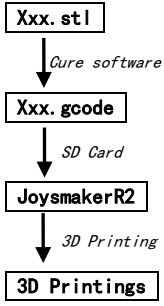
Adjust the thumb-screws

Note: Use the clamp to nip tight the glass bed and the aluminum bed.

乐享 3D
www.3DJoy.cn

3 Prepare to print

3.1 Know the principle



乐享3D
www.3DJoy.cn

3.2 Generate Gcode

3.2.1 Cura install

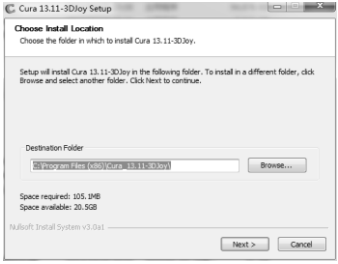
1). Download cura from bellow address

Address: http://www.3djoy.cn —>>常用软件下载—>> cura

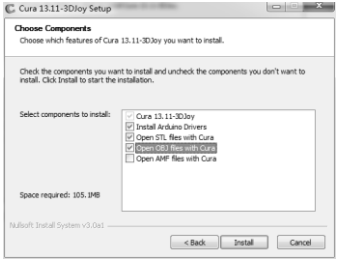
http://www.3djoy.cn/常用工具软件下载/

2).Cura installation

a. Select the directory that you install the cura then press next

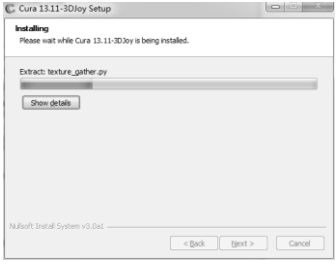

Cura 13.11-3DJoy Setup
Choose Install Location
Choose the folder in which to install Cura 13.11-3DJoy.
Setup will install Cura 13.11-3DJoy in the following folder. To install in a different folder, click Browse and select another folder. Click Next to continue.
Destination Folder
Browse...
Space required: 105.1MB
Space available: 20.5GB
Nullsoft Install System v3.0a1
Next >
Cancel

b. Chose the supported file types


Cura 13.11-3DJoy Setup
Choose Components
Choose which features of Cura 13.11-3DJoy you want to install.
Check the components you want to install and uncheck the components you don't want to install. Click Install to start the installation.
Select components to install:
Cura 13.11-3DJoy
Install Arduino Drivers
Open STL files with Cura
Open OBJ files with Cura
Open AMF files with Cura
Space required: 105.1MB
Nullsoft Install System v3.0a1
< Back
Install
Cancel

乐享 3D
www.3DJoy.cn

c. Cura install



d. Click Next

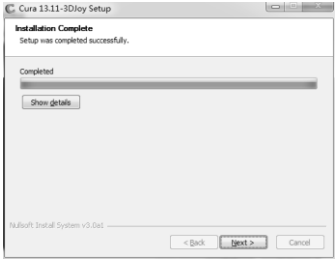
Device Driver Installation Wizard
Welcome to the Device Driver Installation Wizard!
This wizard helps you install the software drivers that some computers devices need in order to work.
To continue, click Next.
< 上一步(B)
下一步(N) >
取消

乐享 3D
www.3DJoy.cn

e. Click finish

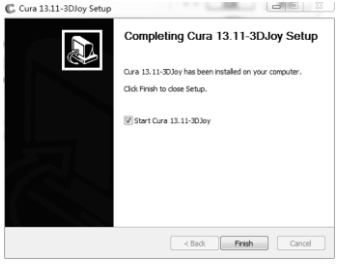
Device Driver Installation Wizard
Completing the Device Driver Installation Wizard
The drivers were successfully installed on this computer.
You can now connect your device to this computer. If your device came with instructions, please read them first.
Driver Name
Status
Arduino LLC (www.ardui...
Ready to use
< 上一步(B)
完成
取消

f. Click next



乐享 3D
www.3DJoy.cn

g. Click finish



Note: When setting up the supported type of joysMaker printer, please select it carefully, if you dont' know which type your machine is, please contact us.

3.2.2 Cura usage

English user guide, you can download from this link:

https://www.ultimaker.com/spree/uploads/38/original/Cura_User-Manual_v1.0.pdf

You can use cura slice your STL into gcode.

乐享3D www.3DJoy.cn

www.3djoy.cn

And copy the gcode into SD card.

Then use LCD controller to start printing.

乐享3D
www.3DJoy.cn

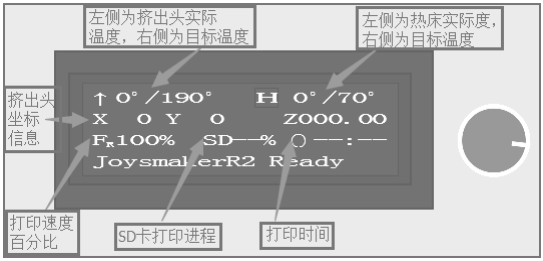
3.3 LCD Controller Options

3.3.1 Introduction on LCD controller

1). LCD controller display

2). Information screen

乐享3D
www.3DJoy.cn



Row1: Actual nozzle temp./target nozzle temp. Actual Heated bed temp./Target heated bed temp

Row2: X, Y , Z coordinate

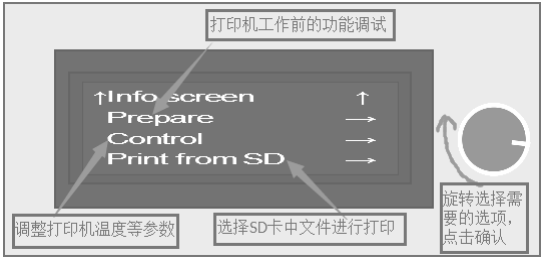
Row3: FR: Printing Speed in ratio. SD: Finished ratio. O: time used.

3.3.2 Operations

1). Info screen>> Main menu

乐享3D
www.3DJoy.cn

www.3djoy.cn



Row1: back to information screen

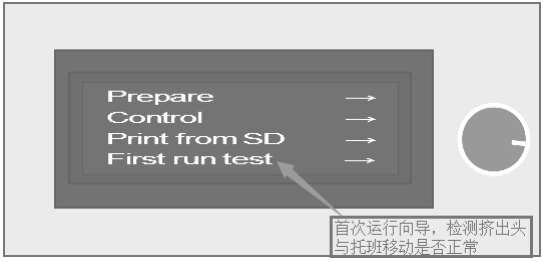
Row2: Prepare: preparation options before printing.

Row3: Control: adjust the printing parameters

Row4: Print from SD: printing gcode files stored in SD card

Button: Press to entre, tune to select

乐享3D
www.3DJoy.cn



2). Main menu >>> prepare

Row2: Disable steppers: after this operation, the motor can be revolved.

Row3: Auto home: Extruder head will go to home position.

Row4: Preheat PLA:

乐享3D
www.3DJoy.cn

Note: Auto home option will let the printing head go to the home position. If the nozzle is too far away from the platform, you can adjust the limit switch on the backplane to adapt the home position.

3). Main menu >>> prepare >>> move axis

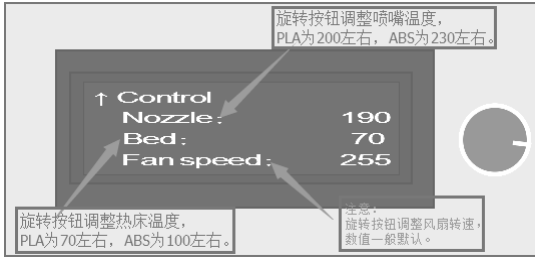
乐享3D
www.3DJoy.cn

Note: When testing the extruder, you need to make sure the nozzle temperature is above 180℃, or else the extruder won't move.

乐享3D
www.3DJoy.cn

4). >>> Main Menu >>> control

5). >>>Main Menu>>> control >>> temperature



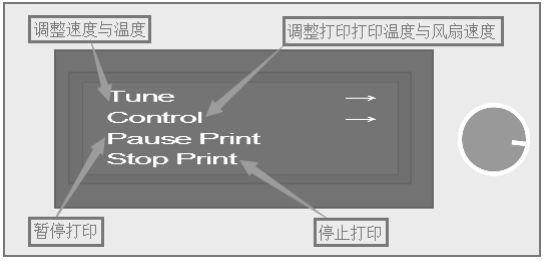
Temperature Setting:

乐享3D
www.3DJoy.cn

Filament	Nozzle(℃)	Heated Bed(℃)
PLA	200	40
ABS	230	70
PVA	100	40
Nylon	260	70

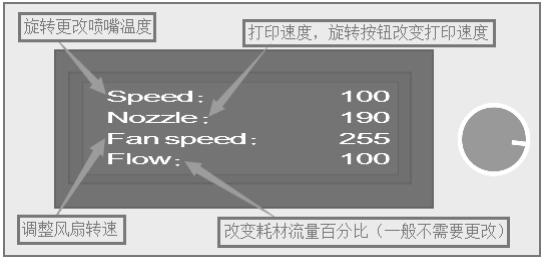
3.3.3 LCD controller option when printing

1). MainMenu



2). >>>Main Menu >>> tune

乐享3D
www.3DJoy.cn



Note:

For those options that are not mentioned, you just need to set it as default.

3.3.4 Fill the nozzle with filament

Method: Preheat PLA, then when the nozzle reaches target temperature >>> Prepare >>> Move Axis >>> chose 1mm step>>> Extruder >>> tune the button, till the filament comes out of the nozzle.

Till now you have finished the preparation before printing.

乐享 3D
www.3DJoy.cn

4 Start to Print

4.1 Power on the printer

Connect the power supply wires, and then turn on the power, check that the LED is shown as bellow:

Normal Display

乐享 3D
www.3DJoy.cn

4.2 Start to Print

Press the button >> turn the button to choose “Print from SD card” >> select the files

You should see your machine is printing now.

乐享3D
www.3DJoy.cn

www.3djoy.cn

admin@3djoy.cn